



03DV-7106  
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Becerra, et al.

: Art Unit: 2837

Serial No.: 09/681,221

: Examiner: Marlon T. Fletcher

Filed: February 27, 2001

:

For: DIGITAL COMMUNICATION  
LINK

:

RECEIVED  
MAY -2 2003  
TECHNOLOGY CENTER 2800

**SUBMISSION OF MARKED UP PARAGRAPHS AND CLAIMS**

Box NON-FEE AMENDMENT

Hon. Commissioner for Patents

Washington, D.C. 20231

Submitted herewith are marked up Paragraphs and Claims in accordance with 37 C.F.R. 1.121(b)(1)(ii) and 1.121(c)(1)(ii).

**IN THE CLAIMS**

Please cancel Claims 3, 45 and 61.

1. (once amended) A method for interfacing an electric motor to a controller using an electrical interface circuit, the interface circuit including a controller circuit and a motor control circuit, the controller circuit including a transmitter circuit and a receiver circuit, the motor control circuit including a transmitter circuit and a receiver circuit, and the interface circuit electrically coupled to the controller and the electric motor, said method comprising the steps of:

receiving a signal from the controller;

adjusting a level of the received signal to a desired level;

converting the signal from the controller to at least one of an infrared signal and an RF signal;

outputting the signal to control the electric motor;

receiving a signal from the electric motor; and

transmitting the received signal from the electric motor to the controller.

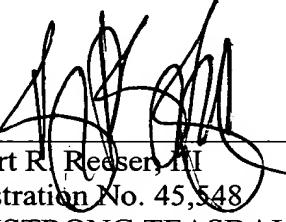
31. (once amended) An electrical interface circuit comprising a controller circuit electrically coupled to a motor control circuit, said controller circuit comprising a transmitter circuit and a receiver circuit, said motor control circuit comprising a transmitter circuit and a receiver circuit, said interface circuit electrically connected to a controller and electrically connected to an electric motor, said controller circuit configured to convert a voltage signal to at least one of an infrared signal and an RF signal.

54. (once amended) An electrical interface circuit for a HVAC system [including] comprising an electronically commutated motor, said electrical interface comprising a controller circuit electrically connected to a motor control circuit using a serial four-wire communications cable, said controller circuit comprising a transmitter circuit and a receiver circuit, said controller circuit configured to convert a voltage signal to at least one of an infrared signal and an RF signal, said motor control circuit comprising a transmitter circuit including a first optocoupler and a receiver circuit including a second optocoupler, said interface circuit electrically connected to a controller and electrically connected to said electronically commutated motor, wherein said first and second optocouplers configured to isolate signals between said motor control circuit and said electronically commutated motor and said electrical interface configured to interrogate said electronically commutated motor to acquire status and diagnostic information.

58. (once amended) An electrical interface circuit for a HVAC system [including] comprising an electronically commutated motor, said electrical interface comprising a controller circuit electrically connected to a motor control circuit using a digital wireless interface, said controller circuit comprising a transmitter circuit and a receiver circuit, said controller circuit configured to convert a voltage signal to at least one of an infrared signal and an RF signal, said motor control circuit comprising a transmitter circuit including a first optocoupler and a receiver circuit including a second optocoupler, said interface circuit electrically connected to a controller and electrically connected to said

electronically commutated motor, wherein said first and second optocouplers configured to isolate signals between said motor control circuit and said electronically commutated motor and said electrical interface configured to interrogate said electronically commutated motor to acquire status and diagnostic information.

Respectfully submitted,

  
Robert R. Reeser, III  
Registration No. 45,548  
ARMSTRONG TEASDALE LLP  
One Metropolitan Square, Suite 2600  
St. Louis, Missouri 63102-2740  
(314) 621-5070